

WHAT IS CLAIMED IS:

1. A complex of clay silicate and polyoxyalkylene amine grafted polypropylene, which is formed by modifying inorganic layered silicate clay with an amphibious intercalating agent obtained by polymerizing  
5 polyoxyalkylene amine having molecular weight over 1,800 and polypropylene-grafting-maleic anhydride (PP-g-MA).

2. The complex of claim 1, wherein said polyoxyalkylene amine is polyoxyalkylene diamine.

3. The complex of claim 1, wherein said polyoxyalkylene amine is  
10 selected from a group consisting of polyoxypropylene diamine, polyoxyethylene diamine and poly(oxyethylene-oxypropylene) diamine.

4. The complex of claim 1, wherein said clay is selected from a group consisting of montmorillonite, kaolin, mica and talc.

5. The complex of claim 1, wherein said clay has a cation exchange  
15 capacity between 50-200 meq/100g.

6. A method for producing a complex of clay and polyoxyalkylene amine, wherein said clay is layered and includes silicate; said method is primarily to polymerize said polyoxyalkylene amine having molecular weight over 1,800 and polypropylene-grafting-maleic anhydride (PP-g-  
20 MA) to form an amphibious intercalating agent, which is then acidified with an inorganic acid, and mixed with said swelled clay by powerfully stirring at 60-80°C for cation exchanging to obtain said complex.

7. The method of claim 6, wherein said clay is selected from a group consisting of montmorillonite, kaolin, mica and talc.

8. The method of claim 6, wherein said clay has a cation exchange  
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capacity between 50-200 meq/100g.

9. The method of claim 6, wherein said polyoxyalkylene amine is polyoxyalkylene diamine.

10. The method of claim 6, wherein said polyoxyalkylene amine is  
5 selected from a group consisting of polyoxypropylene diamine, polyoxyethylene diamine and poly(oxyethylene-oxypropylene) diamine adduct.

11. The method of claim 6, wherein said inorganic acid is selected from a group consisting of hydrochloric acid, sulfuric acid, phosphoric acid and nitric acid.

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